

# FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO  
Enterprise Hydrocarbons L.P.

AUTHORIZING THE OPERATION OF  
Yoakum Cryogenic Plant  
Natural Gas Extraction

LOCATED AT  
Lavaca County, Texas  
Latitude 29° 20' 44" Longitude 97° 6' 33"  
Regulated Entity Number: RN106059777

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No:     O3521     Issuance Date: \_\_\_\_\_

\_\_\_\_\_  
For the Commission

## Table of Contents

Section	Page
General Terms and Conditions .....	1
Special Terms and Conditions: .....	1
Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting.....	1
Additional Monitoring Requirements .....	6
New Source Review Authorization Requirements .....	6
Compliance Requirements.....	7
Risk Management Plan .....	8
Permit Location .....	8
Permit Shield (30 TAC § 122.148) .....	8
Attachments .....	9
Applicable Requirements Summary.....	10
Additional Monitoring Requirements .....	22
Permit Shield .....	24
New Source Review Authorization References .....	26
Appendix A.....	31
Acronym List .....	32

## **General Terms and Conditions**

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

## **Special Terms and Conditions:**

### **Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting**

1. Permit holder shall comply with the following requirements:
  - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
  - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.
  - C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.
  - D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.
  - E. Emission units subject to 40 CFR Part 63, Subpart HH and ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113,

Subchapter C, § 113.390 and 113.1090 which incorporates the 40 CFR Part 63 Subpart by reference.

2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
  - A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
  - B. Title 30 TAC § 101.3 (relating to Circumvention)
  - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
  - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
  - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
  - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
  - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
  - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
  - I. Title 30 TAC § 101.222 (relating to Demonstrations)
  - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
  - A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
    - (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
    - (ii) Title 30 TAC § 111.111(a)(1)(E)
    - (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
    - (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that

does not obstruct the transmission of light. Vents, as specified in the “Applicable Requirements Summary” attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:

- (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
- (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.
- (3) Records of all observations shall be maintained.
- (4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
- (5) Compliance Certification:
  - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
  - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is

determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

- (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)
- (iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
  - (1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.
  - (2) Records of all observations shall be maintained.
  - (3) Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A)
- (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

C. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:

- (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
- (ii) Sources with an effective stack height ( $h_e$ ) less than the standard effective stack height ( $H_e$ ), must reduce the allowable emission level by multiplying it by  $[h_e/H_e]^2$  as required in 30 TAC § 111.151(b)
- (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)

4. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:

- A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
- B. Title 40 CFR § 60.8 (relating to Performance Tests)
- C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
- D. Title 40 CFR § 60.12 (relating to Circumvention)
- E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
- F. Title 40 CFR § 60.14 (relating to Modification)
- G. Title 40 CFR § 60.15 (relating to Reconstruction)
- H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)

5. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.
6. For oil and natural gas production facilities as specified in 40 CFR Part 63, Subpart HH, the permit holder shall comply with the following requirements (Title 30 TAC Chapter 113, Subchapter C, § 113.390 incorporated by reference):
  - A. Title 40 CFR § 63.760(c) (relating to Applicability and Designation of Affected Source)

#### **Additional Monitoring Requirements**

7. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time or minimum frequency specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

#### **New Source Review Authorization Requirements**

8. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
  - A. Are incorporated by reference into this permit as applicable requirements
  - B. Shall be located with this operating permit
  - C. Are not eligible for a permit shield
9. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
10. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

11. The permit holder shall comply with the following requirements for Air Quality Standard Permits:
- A. Registration requirements listed in 30 TAC § 116.611, unless otherwise provided for in an Air Quality Standard Permit
  - B. General Conditions listed in 30 TAC § 116.615, unless otherwise provided for in an Air Quality Standard Permit
  - C. Applicable requirements of 30 TAC § 116.620 for Installation and/or Modification of Oil and Gas Facilities based on the information contained in the registration application.

### **Compliance Requirements**

12. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
13. Use of Discrete Emission Credits to comply with the applicable requirements:
- A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
    - (i) Title 30 TAC Chapter 115
    - (ii) Title 30 TAC Chapter 117
    - (iii) If applicable, offsets for Title 30 TAC Chapter 116
    - (iv) Temporarily exceed state NSR permit allowables
  - B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
    - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
    - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
    - (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
    - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122
    - (v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

## **Risk Management Plan**

14. For processes subject to 40 CFR Part 68 and specified in 40 CFR § 68.10, the permit holder shall comply with the requirements of the Accidental Release Prevention Provisions in 40 CFR Part 68. The permit holder shall submit to the appropriate agency either a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR § 68.10(a), or as part of the compliance certification submitted under this permit, a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of a risk management plan.

## **Permit Location**

15. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit at: Enterprise Products Operating LLC, c/o Environmental Department, 1100 Louisiana Street, Houston, TX 77002.

## **Permit Shield (30 TAC § 122.148)**

16. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

## **Attachments**

**Applicable Requirements Summary**

**Additional Monitoring Requirements**

**Permit Shield**

**New Source Review Authorization References**

### **Applicable Requirements Summary**

**Unit Summary ..... 11**

**Applicable Requirements Summary ..... 12**

Note: A “none” entry may be noted for some emission sources in this permit’s “Applicable Requirements Summary” under the heading of “Monitoring and Testing Requirements” and/or “Recordkeeping Requirements” and/or “Reporting Requirements.” Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
FL-1	FLARES	N/A	R111-3	30 TAC Chapter 111, Visible Emissions	No changing attributes.
FUG1	FUGITIVE EMISSION UNITS	N/A	60KKK-ALL	40 CFR Part 60, Subpart KKK	No changing attributes.
FUG2	FUGITIVE EMISSION UNITS	N/A	60KKK-02	40 CFR Part 60, Subpart KKK	No changing attributes.
GRP-EMERG	SRIC ENGINES	EMERG1, EMERG2	60IIII	40 CFR Part 60, Subpart IIII	No changing attributes.
GRP-EMERG	SRIC ENGINES	EMERG1, EMERG2	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GRP-HTR	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	HTR-1, HTR-2, HTR-3	60Dc	40 CFR Part 60, Subpart Dc	No changing attributes.
GRP-TO	GLYCOL DEHYDRATION	TO-1, TO-2, TO-3	63HH	40 CFR Part 63, Subpart HH	No changing attributes.
GRP-TURB1	STATIONARY TURBINES	TURB1, TURB2, TURB3, TURB4, TURB5, TURB6, TURB7	60KKKK-1	40 CFR Part 60, Subpart KKKK	No changing attributes.
GRP-TURB2	STATIONARY TURBINES	TURB10, TURB11, TURB12, TURB13, TURB8, TURB9	60KKKK-2	40 CFR Part 60, Subpart KKKK	No changing attributes.
GRP-VENT	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	EMERG1V, EMERG2V, TO-1V, TO-2V, TO-3V, TURB10V, TURB11V, TURB12V, TURB13V, TURB1V, TURB2V, TURB3V, TURB4V, TURB5V, TURB6V, TURB7V, TURB8V, TURB9V	R111-2	30 TAC Chapter 111, Visible Emissions	No changing attributes.

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FL-1	EU	R111-3	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period, except for upset emissions as provided in §101.222(b).	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None
FUG1	EU	60KKK-ALL	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(f)	Use this provision instead of §60.485(d)(1). Each component is presumed to be in VOC service or in wet gas service unless it is not. For a component to be considered not in VOC service, it must be determined that the % VOC content can never be expected to exceed 10.0 % by wt. For a component to be considered in wet gas service, it must be determined that it contains or contacts the field gas before the extraction step in the process. To determine VOC content use the procedures in §60.63.	§ 60.632(f)	§ 60.632(f)	None
FUG1	EU	60KKK-ALL	VOC	40 CFR Part 60, Subpart KKK	§ 60.633(f)	Reciprocating compressors in wet gas service are exempt from the compressor control requirements of §60.482-3.	None	§ 60.486(j) § 60.635(c)	None
FUG1	EU	60KKK-ALL	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-3(a) [G]§ 60.482-3(b) § 60.482-3(c) § 60.482-3(d) § 60.482-3(e)(1) § 60.482-3(e)(2) § 60.482-3(f)	Comply with the requirements for compressors as stated in §60.482-3 and §60.482-1(a), (b) and (d), except as provided in §60.633.	§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) § 60.485(d)(2) § 60.485(d)(3) [G]§ 60.485(e) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(h) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements  (30 TAC § 122.144)	Reporting Requirements  (30 TAC § 122.145)
					§ 60.482-3(g)(1) § 60.482-3(g)(2) § 60.482-3(h) [G]§ 60.482-3(i) § 60.482-3(j) § 60.482-9(a) § 60.482-9(b) § 60.486(k)				
FUG1	EU	60KKK-ALL	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(d) § 60.486(k)	Equipment in vacuum service to comply with §60.482-1(a), (b), and (d) and §60.482-2 to §60.482-10, except as provided in §60.633 or §60.482-1(d).	None	[G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(5) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
FUG1	EU	60KKK-ALL	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-2(a)(2) § 60.482-2(b)(1) [G]§ 60.482-2(b)(2) § 60.482-2(c)(1) [G]§ 60.482-2(c)(2) § 60.482-2(d) [G]§ 60.482-2(d)(1) § 60.482-2(d)(2) § 60.482-2(d)(3) [G]§ 60.482-2(d)(4) [G]§ 60.482-2(d)(5) [G]§ 60.482-2(d)(6) [G]§ 60.482-2(e) § 60.482-2(f) [G]§ 60.482-2(g) § 60.482-2(h) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(d) § 60.482-9(f) § 60.486(k)	Comply with the requirements for pumps in light liquid service as stated in §60.482-2 and §60.482-1(a), (b) and (d), except as provided in §60.633.	§ 60.482-1(f)(1) § 60.482-1(f)(2) [G]§ 60.482-1(f)(3) § 60.482-2(a)(1) [G]§ 60.482-2(b)(2) [G]§ 60.482-2(d)(4) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) § 60.485(d)(2) § 60.485(d)(3) [G]§ 60.485(e) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(f) [G]§ 60.486(h) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements  (30 TAC § 122.144)	Reporting Requirements  (30 TAC § 122.145)
FUG1	EU	60KKK-ALL	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-4(a) § 60.482-4(b)(1) § 60.482-4(c) § 60.482-4(d)(1) § 60.482-4(d)(2) § 60.482-9(a) § 60.482-9(b) § 60.486(k) [G]§ 60.633(b)(3)	Comply with the requirements for pressure relief devices in gas/vapor service as stated in §60.482-4 and 60.482-1(a), (b) and (d), except as provided in §60.633.	§ 60.482-4(b)(2) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) § 60.485(d)(2) § 60.485(d)(3) § 60.485(f) § 60.632(d) § 60.633(b)(1) § 60.633(b)(2) [G]§ 60.633(b)(3) [G]§ 60.633(b)(4)	§ 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(3) [G]§ 60.486(e)(4) § 60.486(j) [G]§ 60.633(b)(4) [G]§ 60.635(b)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636
FUG1	EU	60KKK-ALL	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-6(a)(1) § 60.482-6(a)(2) § 60.482-6(b) § 60.482-6(c) § 60.482-6(d) § 60.482-6(e) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(c) § 60.482-9(e) § 60.482-9(f) § 60.486(k)	Comply with the requirements for open-ended valves or lines as stated in §60.482-6 and §60.482-1(a), (b) and (d), except as provided in §60.633.	§ 60.485(a) [G]§ 60.485(b) § 60.485(d)(2) § 60.485(d)(3) § 60.485(f) § 60.632(d)	§ 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636
FUG1	EU	60KKK-ALL	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-7(b) § 60.482-7(d)(1) § 60.482-7(d)(2) [G]§ 60.482-7(e) [G]§ 60.482-7(f)	Comply with the requirements for valves in gas/vapor service as stated in §60.482-7 and §60.482-1(a), (b) and (d), except as provided in §60.633.	§ 60.482-1(f)(1) § 60.482-1(f)(2) [G]§ 60.482-1(f)(3) § 60.482-7(a)(1) [G]§ 60.482-7(a)(2) § 60.482-7(c)(1)(i) § 60.482-7(c)(1)(ii) § 60.482-7(c)(2) § 60.485(a)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(f)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 60.482-7(g) [G]§ 60.482-7(h) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(c) § 60.482-9(e) § 60.482-9(f) § 60.486(k)		[G]§ 60.485(b) [G]§ 60.485(c) § 60.485(d)(2) § 60.485(d)(3) [G]§ 60.485(e) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	§ 60.486(j)	
FUG1	EU	60KKK-ALL	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-7(b) § 60.482-7(d)(1) § 60.482-7(d)(2) [G]§ 60.482-7(e) [G]§ 60.482-7(f) [G]§ 60.482-7(g) [G]§ 60.482-7(h) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(c) § 60.482-9(e) § 60.482-9(f) § 60.486(k)	Comply with the requirements for valves in light liquid service as stated in §60.482-7 and §60.482-1(a), (b) and (d), except as provided in §60.633.	§ 60.482-1(f)(1) § 60.482-1(f)(2) [G]§ 60.482-1(f)(3) § 60.482-7(a)(1) [G]§ 60.482-7(a)(2) § 60.482-7(c)(1)(i) § 60.482-7(c)(1)(ii) § 60.482-7(c)(2) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) § 60.485(d)(2) § 60.485(d)(3) [G]§ 60.485(e) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(f) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636
FUG1	EU	60KKK-ALL	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(d)	Comply with the requirements for pumps in heavy liquid service as stated in §60.482-8, except as provided in §60.633.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) § 60.485(d)(2) § 60.485(d)(3) [G]§ 60.485(e) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.482-9(f) § 60.486(k)				
FUG1	EU	60KKK-ALL	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.486(k)	Comply with the requirements for pressure relief devices in light liquid service as stated in §60.482-8, except as provided in §60.633.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) § 60.485(d)(2) § 60.485(d)(3) [G]§ 60.485(e) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636
FUG1	EU	60KKK-ALL	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.486(k)	Comply with the requirements for pressure relief devices in heavy liquid service as stated in §60.482-8, except as provided in §60.633.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) § 60.485(d)(2) § 60.485(d)(3) [G]§ 60.485(e) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636
FUG1	EU	60KKK-ALL	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.486(k)	Comply with the requirements for connectors as stated in §60.482-8, except as provided in §60.633.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) § 60.485(d)(2) § 60.485(d)(3) [G]§ 60.485(e) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements  (30 TAC § 122.144)	Reporting Requirements  (30 TAC § 122.145)
					§ 60.482-9(a) § 60.482-9(b) § 60.486(k)				
FUG1	EU	60KKK-ALL	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(c) § 60.482-9(e) § 60.482-9(f) § 60.486(k)	Comply with the requirements for valves in heavy liquid service as stated in §60.482-8, except as provided in §60.633.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) § 60.485(d)(2) § 60.485(d)(3) [G]§ 60.485(e) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636
FUG2	EU	60KKK-02	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-2(a)(2) § 60.482-2(b)(1) [G]§ 60.482-2(b)(2) § 60.482-2(c)(1) [G]§ 60.482-2(c)(2) § 60.482-2(d) [G]§ 60.482-2(d)(1) § 60.482-2(d)(2) § 60.482-2(d)(3) [G]§ 60.482-2(d)(4) [G]§ 60.482-2(d)(5) [G]§ 60.482-2(d)(6) [G]§ 60.482-2(e) § 60.482-2(f) [G]§ 60.482-2(g)	Comply with the requirements for pumps in light liquid service as stated in §60.482-2 and §60.482-1(a), (b) and (d), except as provided in §60.633.	§ 60.482-1(f)(1) § 60.482-1(f)(2) [G]§ 60.482-1(f)(3) § 60.482-2(a)(1) [G]§ 60.482-2(b)(2) [G]§ 60.482-2(d)(4) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) § 60.485(d)(2) § 60.485(d)(3) [G]§ 60.485(e) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(f) [G]§ 60.486(h) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements  (30 TAC § 122.144)	Reporting Requirements  (30 TAC § 122.145)
					§ 60.482-2(h) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(d) § 60.482-9(f) § 60.486(k)				
FUG2	EU	60KKK-02	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-7(b) § 60.482-7(d)(1) § 60.482-7(d)(2) [G]§ 60.482-7(e) [G]§ 60.482-7(f) [G]§ 60.482-7(g) [G]§ 60.482-7(h) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(c) § 60.482-9(e) § 60.482-9(f) § 60.486(k)	Comply with the requirements for valves in light liquid service as stated in §60.482-7 and §60.482-1(a), (b) and (d), except as provided in §60.633.	§ 60.482-1(f)(1) § 60.482-1(f)(2) [G]§ 60.482-1(f)(3) § 60.482-7(a)(1) [G]§ 60.482-7(a)(2) § 60.482-7(c)(1)(i) § 60.482-7(c)(1)(ii) § 60.482-7(c)(2) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) § 60.485(d)(2) § 60.485(d)(3) [G]§ 60.485(e) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(f) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636
FUG2	EU	60KKK-02	VOC	40 CFR Part 60, Subpart KKK	§ 60.632(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.486(k)	Comply with the requirements for connectors as stated in §60.482-8, except as provided in §60.633.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) § 60.485(d)(2) § 60.485(d)(3) [G]§ 60.485(e) § 60.485(f) § 60.632(d) [G]§ 60.633(h)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) [G]§ 60.636
GRP-EMERG	EU	60III	NMHC and NO <sub>x</sub>	40 CFR Part 60, Subpart III	§ 60.4205(c)-Table 4 § 60.4206	Owners and operators of emergency stationary fire pump	None	None	None

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) § 60.4211(f) § 60.4211(f)(1) § 60.4211(f)(2) § 60.4211(f)(2)(i) § 60.4218	CI ICE with a maximum engine power greater than or equal to 130 KW and less than or equal to 560 KW and a displacement of less than 30 liters per cylinder and is a 2009 model year and later must comply with an NMHC+NOx emission limit of 4.0 g/KW-hr, as listed in Table 4 to this subpart.			
GRP-EMERG	EU	60III	PM	40 CFR Part 60, Subpart III	§ 60.4205(c)-Table 4 § 60.4206 [G]§ 60.4211(a) § 60.4211(c) § 60.4211(f) § 60.4211(f)(1) § 60.4211(f)(2) § 60.4211(f)(2)(i) § 60.4218	Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power greater than or equal to 130 KW and less than or equal to 560 KW and a displacement of less than 30 liters per cylinder and is a 2009 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as listed in Table 4 to this subpart.	None	None	None
GRP-EMERG	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.	None	None	None
GRP-HTR	EU	60Dc	SO <sub>2</sub>	40 CFR Part 60,	§ 60.40c(a)	This subpart applies to each	None	§ 60.48c(g)(1)	[G]§ 60.48c(a)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				Subpart Dc		steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).		§ 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	
GRP-HTR	EU	60Dc	PM	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a)
GRP-HTR	EU	60Dc	PM (Opacity)	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a)
GRP-TO	EU	63HH	112(B) HAPS	40 CFR Part 63, Subpart HH	§ 63.764(e)(1)(ii) § 63.764(a) § 63.764(e)(1) § 63.764(j) § 63.775(c)(8)	The owner or operator of an area source is exempt from the requirements of §63.764(d) when the actual average emissions of benzene from the glycol dehydration unit process vent to the atmosphere < 0.90 megagram/yr, as determined by the procedures specified in §63.772(b)(2) of this subpart.	[G]§ 63.772(b)(2)	§ 63.774(d)(1) § 63.774(d)(1)(ii)	None
GRP-TURB1	EU	60KKKK-1	NO <sub>x</sub>	40 CFR Part 60, Subpart KKKK	§ 60.4320(a)-Table 1 § 60.4320(a) § 60.4320(b) § 60.4325 § 60.4333(a)	New, modified, or reconstructed turbine firing natural gas with a heat input at peak load > 850 MMBtu/h must meet the nitrogen oxides emission standard of 15 ppm at 15 percent O <sub>2</sub> .	§ 60.4340(a) [G]§ 60.4400(a) § 60.4400(b) § 60.4400(b)(1) § 60.4400(b)(4) § 60.4400(b)(6)	None	§ 60.4375(b)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-TURB1	EU	60KKKK-1	SO <sub>2</sub>	40 CFR Part 60, Subpart KKKK	§ 60.4330(a)(2) § 60.4333(a)	You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO <sub>2</sub> /J (0.060 lb SO <sub>2</sub> /MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement.	§ 60.4365 § 60.4365(a) § 60.4415(a) § 60.4415(a)(2)	§ 60.4365(a)	None
GRP-TURB2	EU	60KKKK-2	NO <sub>x</sub>	40 CFR Part 60, Subpart KKKK	§ 60.4320(a)-Table 1 § 60.4320(a) § 60.4320(b) § 60.4325 § 60.4333(a)	New turbine firing natural gas with a heat input at peak load greater than 50 MMBtu/h and less than or equal to 850 MMBtu/h must meet the nitrogen oxides emission standard of 25 ppm at 15 percent O <sub>2</sub> .	§ 60.4340(a) [G]§ 60.4400(a) § 60.4400(b) § 60.4400(b)(1) § 60.4400(b)(4) § 60.4400(b)(6)	None	§ 60.4375(b)
GRP-TURB2	EU	60KKKK-2	SO <sub>2</sub>	40 CFR Part 60, Subpart KKKK	§ 60.4330(a)(2) § 60.4333(a)	You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO <sub>2</sub> /J (0.060 lb SO <sub>2</sub> /MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement.	§ 60.4365 § 60.4365(a) § 60.4415(a) § 60.4415(a)(2)	§ 60.4365(a)	None
GRP-VENT	EP	R111-2	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None

**Additional Monitoring Requirements**

**Periodic Monitoring Summary ..... 23**

### Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRP-VENT	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R111-2
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Fuel Type	
Minimum Frequency: Annually or at any time an alternate fuel is used	
Averaging Period: n/a	
<p>Deviation Limit: If an alternate fuel (other than NG) is fired for a period &gt; than or = 24 consecutive hrs, then report as a deviation or conduct observations using TM 22. If visible emissions are observed then report as a deviation or determine opacity using TM 9.</p>	
<p>Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, for a period greater than or equal to 24 consecutive hours it shall be considered and reported as a deviation or the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are observed. Any time an alternate fuel is fired for a period of greater than 7 consecutive days then visible emissions observations will be conducted no less than once per week. Documentation of all observations shall be maintained. If visible emissions are present during the firing of an alternate fuel, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.</p>	

**Permit Shield**

**Permit Shield ..... 25**

### Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
FL-1	N/A	40 CFR Part 60, Subpart A	Not required by a subpart referring to 40 CFR 60, Subpart A.
FL-1	N/A	40 CFR Part 63, Subpart A	Not required by another subpart of 40 CFR Part 63.
FL-2	N/A	40 CFR Part 60, Subpart A	Not required by a subpart referring to 40 CFR 60, Subpart A.
FL-2	N/A	40 CFR Part 63, Subpart A	Not required by another subpart of 40 CFR Part 63.
GRP-AMINE	AMINE1, AMINE2, AMINE3	40 CFR Part 60, Subpart LLL	Facility is not an affected facility since it does not process sour natural gas. H2S content of the gas stream is less than 0.25 grains per 100 standard cubic feet.
GRP-TANK	TK 137, TK 138, TK 139, TK 141, TK 142	40 CFR Part 60, Subpart Kb	Pressure vessel is designed to operate in excess of 204.9 kPa and without emissions to the atmosphere.
TANK2	N/A	40 CFR Part 60, Subpart Kb	The tank has a capacity below 19,810 gallons.
TANK2	N/A	40 CFR Part 60, Subpart OOOO	Construction for storage unit commenced before August 23, 2011 and unit has not been modified or reconstructed since then.
TANK3	N/A	40 CFR Part 60, Subpart Kb	The tank has a capacity below 19,810 gallons.
TANK3	N/A	40 CFR Part 60, Subpart OOOO	Construction for storage unit commenced before August 23, 2011 and unit has not been modified or reconstructed since then.

**New Source Review Authorization References**

<b>New Source Review Authorization References .....</b>	<b>27</b>
<b>New Source Review Authorization References by Emission Unit .....</b>	<b>28</b>

### New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 94438	Issuance Date: 05/15/2014
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.353	Version No./Date: 09/04/2000
Number: 106.355	Version No./Date: 11/01/2001
Number: 106.359	Version No./Date: 09/10/2013
Number: 106.511	Version No./Date: 09/04/2000

### New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
AMINE1	AMINE UNIT 1	94438
AMINE2	AMINE UNIT 2	94438
AMINE3	AMINE UNIT 3	94438
EMERG1	EMERGENCY FIRE PUMP ENGINE 1	106.511/09/04/2000
EMERG1V	EMERGENCY FIRE PUMP ENGINE 1 VENT	106.511/09/04/2000
EMERG2	EMERGENCY FIRE PUMP ENGINE 2	106.511/09/04/2000
EMERG2V	EMERGENCY FIRE PUMP ENGINE 2 VENT	106.511/09/04/2000
FL-1	SONIC FLARE	94438
FL-2	UPSET FLARE	94438
FUG1	FUGITIVES EMISSIONS	94438
FUG2	FUGITIVES	94438
HTR-1	REGENERATOR GAS HEATER TRAIN 1	94438
HTR-2	REGENERATOR HEATER TRAIN 2	94438
HTR-3	REGENERATOR HEATER TRAIN 3	94438
TANK2	SLOP OIL TANK	94438
TANK3	SLOP OIL TANK	94438
TK 137	CONDENSATE TANK 127	94438
TK 138	CONDENSATE TANK 138	94438
TK 139	CONDENSATE TANK 139	94438
TK 141	CONDENSATE TANK 141	94438
TK 142	CONDENSATE TANK 142	94438

### New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
TO-1	TRAIN 1 THERMAL OXIDIZER	94438
TO-1V	TRAIN 1 THERMAL OXIDIZER VENT	94438
TO-2	TRAIN 2 THERMAL OXIDIZER	94438
TO-2V	TRAIN 2 THERMAL OXIDIZER VENT	94438
TO-3	TRAIN 3 THERMAL OXIDIZER	94438
TO-3V	TRAIN 3 THERMAL OXIDIZER VENT	94438
TURB10	SOLAR CENTAUR 50-6100S TURBINE 10	94438
TURB10V	SOLAR CENTAUR 50-61000S TURBINE 10 VENT	94438
TURB11	SOLAR CENTAUR 50-6100S TURBINE 11	94438
TURB11V	SOLAR CENTAUR 50-61000S TURBINE 11 VENT	94438
TURB12	SOLAR CENTAUR 50-6100S TURBINE 12	94438
TURB12V	SOLAR CENTAUR 50-61000S TURBINE 12 VENT	94438
TURB13	SOLAR CENTAUR 50-6100S TURBINE 13	94438
TURB13V	SOLAR CENTAUR 50-61000S TURBINE 13 VENT	94438
TURB1	SOLAR MARS 100-15000S TURBINE 1	94438
TURB1V	SOLAR MARS 100-15000S TURBINE 1 VENT	94438
TURB2	SOLAR MARS 100-15000S TURBINE 2	94438
TURB2V	SOLAR MARS 100-15000S TURBINE 2 VENT	94438
TURB3	SOLAR MARS 100-15000S TURBINE 3	94438
TURB3V	SOLAR MARS 100-15000S TURBINE 3 VENT	94438
TURB4	SOLAR MARS 100-15000S TURBINE 4	94438

### New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
TURB4V	SOLAR MARS 100-15000S TURBINE 4 VENT	94438
TURB5	SOLAR MARS 100-15000S TURBINE 5	94438
TURB5V	SOLAR MARS 100-15000S TURBINE 5 VENT	94438
TURB6	SOLAR MARS 100-15000S TURBINE 6	94438
TURB6V	SOLAR MARS 100-15000S TURBINE 6 VENT	94438
TURB7	SOLAR MARS 100-15000S TURBINE 7	94438
TURB7V	SOLAR MARS 100-15000S TURBINE 7 VENT	94438
TURB8	SOLAR CENTAUR 50-6100S TURBINE 8	94438
TURB8V	SOLAR CENTAUR 50-61000S TURBINE 8 VENT	94438
TURB9	SOLAR CENTAUR 50-6100S TURBINE 9	94438
TURB9V	SOLAR CENTAUR 50-61000S TURBINE 9 VENT	94438

**Appendix A**

**Acronym List ..... 32**

## Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM .....	actual cubic feet per minute
AMOC .....	alternate means of control
ARP .....	Acid Rain Program
ASTM .....	American Society of Testing and Materials
B/PA .....	Beaumont/Port Arthur (nonattainment area)
CAM .....	Compliance Assurance Monitoring
CD .....	control device
CEMS .....	continuous emissions monitoring system
CFR .....	Code of Federal Regulations
COMS .....	continuous opacity monitoring system
CVS .....	closed vent system
D/FW .....	Dallas/Fort Worth (nonattainment area)
EP .....	emission point
EPA .....	U.S. Environmental Protection Agency
EU .....	emission unit
FCAA Amendments .....	Federal Clean Air Act Amendments
FOP .....	federal operating permit
gr/100 scf .....	grains per 100 standard cubic feet
HAP .....	hazardous air pollutant
H/G/B .....	Houston/Galveston/Brazoria (nonattainment area)
H <sub>2</sub> S .....	hydrogen sulfide
ID No. ....	identification number
lb/hr .....	pound(s) per hour
MACT .....	Maximum Achievable Control Technology (40 CFR Part 63)
MMBtu/hr .....	Million British thermal units per hour
NA .....	nonattainment
N/A .....	not applicable
NADB .....	National Allowance Data Base
NESHAP .....	National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
NO <sub>x</sub> .....	nitrogen oxides
NSPS .....	New Source Performance Standard (40 CFR Part 60)
NSR .....	New Source Review
ORIS .....	Office of Regulatory Information Systems
Pb .....	lead
PBR .....	Permit By Rule
PEMS .....	predictive emissions monitoring system
PM .....	particulate matter
ppmv .....	parts per million by volume
PRO .....	process unit
PSD .....	prevention of significant deterioration
psia .....	pounds per square inch absolute
SIP .....	state implementation plan
SO <sub>2</sub> .....	sulfur dioxide
TCEQ .....	Texas Commission on Environmental Quality
TSP .....	total suspended particulate
TVP .....	true vapor pressure
U.S.C. ....	United States Code
VOC .....	volatile organic compound